Application No.: 10/671,319

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Docket No.: 08226/100S142-US1

## **REMARKS**

Claims 1-29 are pending in this application. Currently no claims stand allowed. The Final Office Action rejected claims 1-29. In this response, applicant has not otherwise amended the pending claims. Applicant submits that the pending claims are patentable for at least the reasons discussed below.

## Rejection Under 35 U.S.C. § 102(b) of Claims 1-29

The instant Final Office Action rejected claims 1-29 as being anticipated by U.S. Patent 6,389,532. Gupta et al. (hereinafter Gupta). Applicants respectfully disagree.

The Open System Interconnection (OSI) reference model is a well known and widely accepted architecture for the operation and implementation of networks. (See http://www.webopedia.internet.com/quick\_ref/OSI\_layers.asp). In the instant case, the OSI model is particularly well suited for clarifying the significant difference between the "domain" of the claimed invention and the multicast group address of Gupta.

In particular, the claimed domain is not an arbitrary group of nodes or addresses that correspond to layer 3 (network layer) of the OSI model, which are typically represented by a tuple of numbers, e.g., 1111.2222.3333.4444. Rather, the domain is a data structure associated with an application or presentation layer message such as email, instant message (IM), or short message service (SMS). (See Specification Page 2, lines 15-17; Page 3, lines 20-28; and Figures 6A and 6B). It is well known that the presentation and application layers operate at layers 6 and 7 respectively in the OSI model, not layer 3.

It is possible for a domain to have a temporal correspondence to a set of network addresses that may change over time, for example by updating a DNS record, by Network Address Translation (NAT), or by round robin DNS. A domain name can be included in the address header, sender envelope, or similar structure (OSI layers 6 or 7). However, a network address need not be unique to a domain, but rather may be repeated in several domains. A network node is also not

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unique to a domain but may be repeated in several domains. Thus in Claims 1-29 there isn't any need for a fixed association between network addresses and key pairs as taught by Gupta.

By contrast, Gupta does not teach generating a key pair corresponding to a domain. Indeed, Gupta does not teach any dynamic level of indirection. Gupta only teaches key pairs corresponding to a fixed and unique Internet Protocol multicast group address. Figure 5 #504, 506. Gupta's senders and receivers of multicast messages join a multicast group by accessing a multicast group address that has been previously set up by a multicast group owner. Gupta et. al. column 1, lines 21-25. Furthermore, senders within a multicast group typically belong to different domains.

Additionally, Gupta does not teach a key pair associated with a name or address associated with a presentation or application layer message (Layer 6 or 7 of the OSI model). Rather, Gupta teaches key pairs corresponding to an OSI layer 3 (network layer) multicast address. Column 1 lines 21-23; figure 5 #506. These addresses correspond to network layer Internet Protocol packets. Figure 4 #314. Furthermore, Gupta consistently recites network layer objects such as routers and packets, and configuring these objects in a particular way (multicast) and within a particular kind of network (Internet Protocol).

Accordingly Gupta does not teach every element of claims 1, 14, 19, 24, 28, and 29, as well as the claims dependent on said claims. Therefore, the independent claims are now in condition for allowance. Furthermore, since claims 2-13, 15-18, 20-23, and 25-27 depend from independent claims 1, 14, 19, and 24, respectively, these dependent claims are allowable for at least substantially the same reasons. For at least these reasons, the applicant requests withdrawal of the rejections of these claims.

In view of the amendment above and the foregoing remarks, applicant believes that this response has addressed fully the concerns expressed in the Final Office Action and that this response places each of the pending claims in condition for immediate allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

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